Claim Amendments

Claim 1 (currently amended): An electrical resistor, comprising:

a resistance zone formed of a metal alloy;

connections;

electrically conductive power supply leads constructed as busbars; and

an insulating layer between said power supply leads for electrically insulating and thermally coupling said power supply leads;

said power supply leads connected to said connections;

said power supply leads running parallel to one another;

said power supply leads having ends remote from said resistance zone;

said ends of said power supply leads being constructed as connection contacts;

~~a construction including~~ said resistance zone and said power supply leads, except for said connection contacts, being completely embedded in an encapsulation of electrically insulating and thermally conducting material~~, and~~

~~another electrically insulating and thermally conducting layer surrounding said construction~~.

Claim 2 (cancelled)

Claim 3 (currently-amended): The electrical resistor according to claim 1, comprising:

an electrically and thermally conducting layer ~~surrounding~~ encapsulating said ~~construction and said other insulating layer~~ encapsulation.

Claim 4 (original): The electrical resistor according to claim 1, wherein said power supply leads are intermeshed in one another.

Claim 5 (original): The electrical resistor according to claim 1, wherein said power supply leads are of coaxial design.

Claim 6 (original): The electrical resistor according to claim 1, wherein said power supply leads are configured in a manner selected from the group consisting of being stacked and being rolled up like a wound capacitor.

Claim 7 (currently amended): An electrical resistor assembly, comprising:

an electrical resistor to be protected from adjacent structural parts producing heat or cold, said electrical resistor including:

a resistance zone formed of a metal alloy;

connections;

electrically conductive power supply leads constructed as busbars; and

an insulating layer between said power supply leads for electrically insulating and thermally coupling said power supply leads;

said power supply leads connected to said connections;

said power supply leads running parallel to one another;

said power supply leads having ends remote from said resistance zone;

said ends of said power supply leads being constructed as connection contacts; and

~~a construction including~~ said resistance zone and said power supply leads, except for said connection contacts, being completely embedded in an encapsulation of electrically insulating and thermally conducting material; and

~~another electrically insulating and thermally conducting layer surrounding said construction; and~~

a protective barrier made of thermally non-conducting material disposed between said electrical resistor and the adjacent structural parts producing heat or cold.

Claim 8 (currently amended): An electrical resistor, comprising:

a resistance zone;

connections having dimensions;

electrically conductive power supply leads constructed as busbars, said electrically conductive power supply leads having a width and a thickness corresponding to said dimensions of said connections; and

an insulating layer between said power supply leads for electrically insulating and thermally coupling said power supply leads;

said power supply leads connected to said connections;

said power supply leads running parallel to one another;

said power supply leads having ends remote from said resistance zone; and

said ends of said power supply leads being constructed as connection contacts;

~~a construction including~~ said resistance zone and said power supply leads, except for said connection contacts, being completely embedded in an encapsulation of electrically insulating and thermally conducting material~~; and~~

~~another electrically insulating and thermally conducting layer surrounding said construction~~.

Claim 9 (previously presented): The electrical resistor according to claim 1, wherein said connections have dimensions and said electrically conductive power supply leads have a width and thickness corresponding to said dimensions of said connections.

Claim 10 (previously presented): The electrical resistor according to claim 1, wherein said metal alloy is manganin.

Claim 11 (previously presented): The electrical resistor according to claim 7, wherein said metal alloy is manganin.